

PRODUCT INFORMATION



L-858,051 (hydrochloride)

Item No. 21206

CAS Registry No.: 115116-37-5
Formal Name: 4-methyl-1-piperazinebutanoic acid, (3R,4aR,5S,6S,6aS,10S,10aR,10bS)-3-ethenyldodecahydro-6,10,10b-trihydroxy-3,4a,7,7,10a-pentamethyl-1-oxo-1H-naphtho[2,1-b]pyran-5-yl ester, dihydrochloride

MF: C₂₉H₅₀N₂O₈ • 2HCl

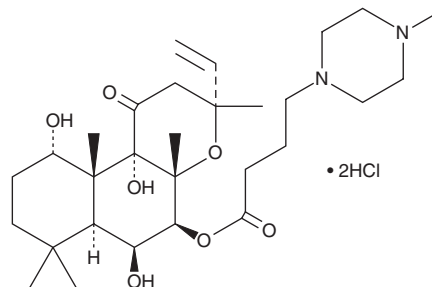
FW: 609.6

Purity: ≥95%

Supplied as: A crystalline solid

Storage: -20°C

Stability: ≥2 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

L-858,051 (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the L-858,051 (hydrochloride) in the solvent of choice. Nemonapride is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of L-858,051 (hydrochloride) in these solvents is approximately 1, 30, and 20 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of L-858,051 (hydrochloride) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of L-858,051 (hydrochloride) in PBS, pH 7.2, is approximately 5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

L-858,051 is a water-soluble analog of forskolin (Item No. 11018), a cell-permeant activator of adenylate cyclase.¹ L-858,051 activates adenylate cyclase (EC₅₀ = 3 μM), inhibits glucose transport, and blocks cytochalasin B (Item No. 11328) binding in rat adipocyte membranes.² L-858,051 is used to activate adenylate cyclase and initiate signaling through elevated cAMP synthesis in a variety of cell types in culture.³⁻⁵

References

1. Laurenza, A., Khandelwal, Y., De Souza, N.J. *et al. Mol. Pharmacol.* **32**(1), 133-139 (1987)
2. Joost, H. G., Habberfield, A.D., Simpson, I.A. *et al. Mol. Pharmacol.* **33**(4), 449-453 (1988).
3. Funaki, C., Hodges, R.R., and Dartt, D.A. *Am. J. Physiol. Cell Physiol.* **293**(5), C1551-C1560 (2007).
4. Luo, S.-F., Chiu, C.-T., Tsao, H.-L., *et al. Cell. Signal.* **9**(2), 159-167 (1997).
5. Haj Slimane, Z., Bedioun, I., Lechêne, P., *et al. Cardiovasc. Res.* **102**(1), 97-106 (2014).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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